

A NEW APTEROUS SPECIES OF ARADIDAE FROM
KENYA (HEMIPTERA)

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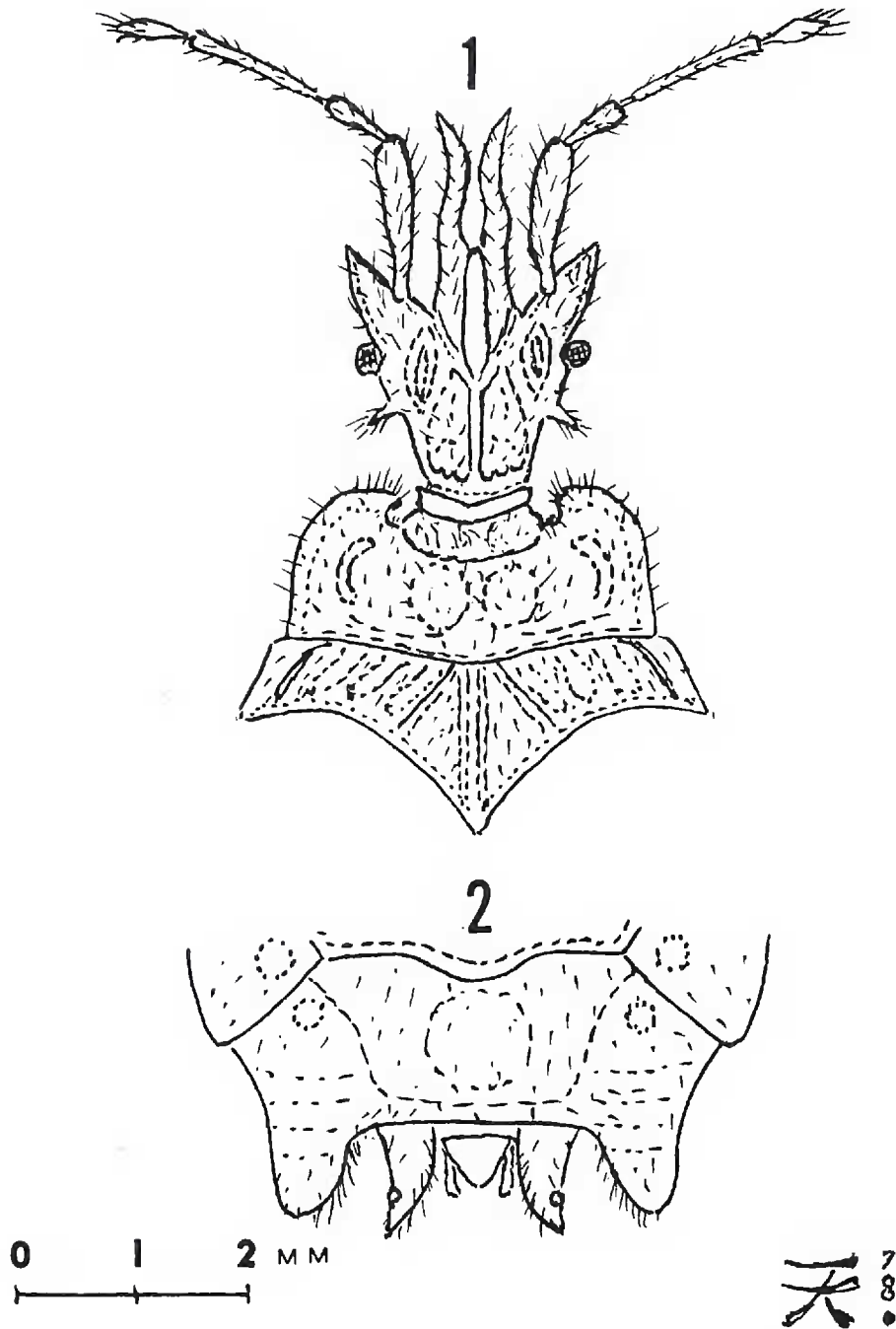
The genus *Usumbaraia* Kormilev, 1956, was established for reception of two apterous species, *Usumbaraia ampliata* Kormilev and *U. elongata* Kormilev, both from Tanganyika. The third species is now described from Kenya. The three species are not very closely related, differing by the shape of head, pronotum and the tip of abdomen. The new species is distinctly pilose, whereas the first two are naked.

All measurements were taken by micromillimeter eyepiece, 25 units = 1 mm. In ratios the first figure represents the length and the second the width of the measured portion.

Usumbaraia arnaudi, new species
(Figs. 1-2)

Female.—Elongate subtriangular, widening backward until connexivum V, then narrowing; postero-exterior angles of connexiva VII produced backward as large, flat, rounded lobes. The whole body sparsely covered with fine, rusty, decumbent hairs. Apterous.

Head.—Longer than its width across eyes (75:50). Anterior process very long and deeply cleft, projecting beyond tip of antennal segment I; clypeus raised, $\frac{1}{2}$ as long as the whole anterior process; genae very long, cleft, with diverging tips. Antenniferous spines dentiform, very strong and diverging. Eyes small, semiglobose, protruding. Postocular borders straight and converging backward, terminating with 2 (1 + 1) strong, acute spines, directed sideways and slightly backward. Hind border behind postocular spines rounded and festooned because of rough, round granulation. Vertex raised in the shape of rhomboid, deeply incised anteriorly and rounded posteriorly, with Y-shaped, deep, median sulcus, extending from antenniferous spines to hind border of head. Infraocular callosities rounded anteriorly and tapering posteriorly, depressed along inner and outer borders. Antennae 1.79 as long as width of head across eyes (89.5:50); antennal segment I stout and clavate, II tapering toward base, III barely tapering toward base, IV fusiform; relative length of antennal segments I to IV are: 30:14:31:14.5. Labium preapical, arising from split atrium and not reaching hind border of labial groove, which is closed posteriorly. Ventral side of head laterad of labial



Figs. 1 and 2. *Usumbaraia arnaudi* n. sp., ♀. Fig. 1, Head, pronotum and mesonotum; Fig. 2, Tip of abdomen, from above.

groove transversely rugose and with 2 (1 + 1) longitudinal carinae sublaterally.

Pronotum.—Subrectangular, shorter than its maximum width across posterolateral angles (35:75) anterio-lateral angles rounded. Collar robust and sinuate anteriorly, fused posteriorly with a stout, transverse ridge. Between collar and anterior borders 2 (1 + 1) deep, rounded incisions. Anterior borders evenly rounded, forming an arc with lateral borders. Hind border slightly convex medially and sinuate laterally. Disc with a deep median sulcus extending from transverse ridge to hind border, flanked by 2 (1 + 1) large, flat, round elevations and further laterad with 2 (1 + 1)

narrow, curved ridges; deeply depressed between ridges and elevations and along borders.

Mesonotum.—Wide and short (35:95), medially produced backward into long, scutellum-like, rhomboidal plate; the latter with a double median carina, not reaching fore border and obliterated posteriorly; all borders of rhomboidal plate carinate; disc, laterad of rhomboidal plate, with 6 (3 + 3) oblique elevations and 2 (1 + 1) sublateral carinae.

Metanotum.—Separated into two large, uneven plates, separated from mesonotum by deep, and from tergum I and connexivum II by thin, sulci. Lateral borders almost straight, slightly diverging backward and terminating into 2 (1 + 1) small, angular processes.

Abdomen.—Longer than its maximum width across segment V (165:135) with rounded lateral borders from II to V, produced backward into 2 (1 + 1) large, flat, rounded lobes on VII. 2 (1 + 1) acute, flat paratergites placed at lower level than connexiva VII. Segment IX tricuspidate placed lower than paratergites. Terga I and II separated from metanotum and from each other by thin, transverse sulci, and from central dorsal plate by a deeper sulcus. Central dorsal plate consisting of segments III to VI, is subrectangular, with slightly convex borders and rather flat. Median ridge is wide and flat, acute anteriorly and truncate posteriorly, flanked by 2 (1 + 1) rows of larger, and by 2 (1 + 1) rows of smaller, round callous spots, each surrounded with carinate borders. Tergum VII raised and then depressed medially. Connexiva flat, each with 2 (one larger and one smaller) round, callous spots along inner borders. Connexiva II and III semifused together. Posteroexternal angles of connexiva II not protruding, III to VI progressively more protruding, VII, as was said, produced into large, rounded lobes. Spiracles II to VII ventral, placed far from border, VIII lateral and visible from above. Metathoracic scent gland opening long and moderately gaping, slightly visible from above.

Prosternum.—With inverted "T"-shaped median ridge. Meso- and metasternum flat.

Legs.—Trochanters free; femora and tibiae cylindrical, unarmed; tarsi with bristle-like arolii.

Color.—Black; labium and tarsi at base, yellow brown.

Total length 12.80 mm; width of pronotum 3.00 mm; width of abdomen 5.40 mm.

Holotype ♀, Kenya, Wundanyi, Teita Hills, 1450 m, 1.XI.1957, E. S. Ross & R. E. Leech leg.; deposited at California Academy of Sciences, San Francisco.

It is a pleasure to dedicate this striking species to Dr. Paul H. Arnaud, Jr.

Usumbaraia arnaudi is more related to *U. elongata* Kormilev 1956, but may be separated from it by the longer and more cleft genae, produced

beyond the tip of antennal segment I, by the postocular spines more developed, by the anterolateral angles of pronotum evenly rounded, by the disc with 2 (1 + 1) large, flat, round elevations laterad of the median sulcus, by the larger and more rounded lobes of connexivum VII, and by the paratergites (♀) larger and produced beyond tips of lobes of VII.

Acknowledgment

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Literature Cited

- Kormilev, N. A. 1956. Notes on Aradidae from the Eastern Hemisphere IX (Hemiptera); Aradidae from the Ethiopian Region. *Ann. Mag. Nat. Hist. Ser. 12*, 9: 250–256, 5 figs.